**Access Modifiers**

**1. Create a class with PRIVATE fields, private method and a main method. Print the fields in main method. Call the private method in main method. Create a sub class and try to access the private fields and methods from sub class.**

class Test {

private int age;

private String name;

public void setAge(int age) {

this.age = age;

}

public void setName(String name) {

this.name = name;

}

public int getAge() {

return this.age;

}

public String getName() {

return this.name;

}

}

class Main {

public static void main(String[] args) {

Test test = new Test();

test.setAge(24);

test.setName("Programiz");

System.out.println("Age: " + test.getAge());

System.out.println("Name: " + test.getName());

}

}

**2. Create a class with DEFAULT fields and methods. Access these fields and methods from any other class in the same package**

class A{

protected void msg(){System.out.println("Hello java");}

}

public class Simple extends A{

void msg(){System.out.println("Hello java");}//C.T.Error

public static void main(String args[]){

Simple obj=new Simple();

obj.msg();

}

}

**3. Create a class with PROTECTED fields and methods. Access these fields and methods from any other class in the same package. Also, Access the PROTECTED fields and methods from child class located in a different package Access the PROTECTED fields and methods from any class in different package**

**4. Create a class with PUBLIC fields and methods. Access the public methods and fields from any class in the same package or different package.**

package abcpackage;

public class Addition {

public int addTwoNumbers(int a, int b){

return a+b;

}

}

Test.java

package xyzpackage;

import abcpackage.\*;

class Test{

public static void main(String args[]){

Addition obj = new Addition();

System.out.println(obj.addTwoNumbers(100, 1));

}

}